

**REFERENCE STORAGE
AND DATA PROTECTION****3.5" ATA DRIVES FOR 24X7
POWER-ON APPLICATIONS****HIGHLIGHTS**

- Large capacity up to 300GB
- 7200 RPM
- SATA 1.5Gb, SATA 3.0 Gb and PATA interfaces
- 16MB cache buffer
- SATA II features
- Native command queuing for 2X improved random read performance over previous generation MaXLine
- 12.5 rad/sec² rotational vibration
- RoHS compliant

EXCEPTIONAL RELIABILITY

- 5-year warranty
- Rated to 1 million hours MTTF* at low I/O duty cycles
- S.M.A.R.T. features

MaXLine[®] III

SATA/PATA HARD DRIVE**250GB 300GB****Large capacity, highly reliable hard drives for reference storage and data protection applications**

MaXLine III provides the capacity, reliability, and features required for mainstream reference storage and data protection applications. With MaXLine III, IT managers can confidently deploy faster, more efficient alternatives to traditional backups, as well as point-in-time copies, snapshot clones and remote replication. Businesses can cost effectively keep more reference data on-line to enhance business decisions and support processes. The third-generation MaXLine drives offer up to 300GB storage capacity and has been designed to meet a Mean Time To Failure (MTTF) of 1 million hours* in low I/O duty cycle nearline applications. Offered with a five-year limited warranty, MaXLine III drives are available in either parallel or serial ATA interfaces.

Maxtor MaxCommand™ technology

- Native command queuing
- Adaptive cache algorithms
- Support for increased cache size—16MB
- Read streaming performance

SATA II features

- Native command queuing
- Hot plug
- Staggered spin-up
- Presence detect
- Identify device
- Set Features
- Asynchronous recovery

RoHS Compliant

Maxtor supports the EU directive for Restriction of Hazardous Substances (RoHS)[†]. RoHS compliant versions of MaXLine III are available.

Best-fit enterprise applications

- Reference storage
- Email archive
- Data warehousing
- Point-in-time copy
- Snapshot clones
- Remote replication
- Disk-to-disk-to-tape
- Video security



[†]Directive 2002/95/EC of the European Parliament and of the Council of 27 January, 2003.

ORDER INFORMATION

Capacity		250GB	300GB
Model	SATA 3Gb, 16MB cache	7V250F0	7V300F0
	SATA 1.5Gb, 16MB cache	7L250S0	7L300S0
	ATA/133, 16MB cache	7L250R0	7L300R0

SPECIFICATIONS

	250GB	300GB
Formatted Capacity (GB)	250	300
Bytes per Sector	512	
Interface	Parallel ATA/133	
	SATA 150	
	SATA 300	

Disk Drive Configurations

	250GB	300GB
Disks	3	3
Heads	5	6
Bytes per Sector/Block	512	

Performance Specifications

Spindle Speed (RPM)	7200
Seek Time:	
Average Read (ms)	9.0
Track-to-Track Read/Write (ms)	0.8
Average Rotational Latency (ms)	4.17
Full Stroke (ms)	<17
Transfer Rate:	
Parallel ATA Maximum Burst Transfer Rate (MB/s)	133
Serial ATA (MB/s)	150
Buffer (Cache) Size (MB)	16

Reliability Specifications

MTTF (Mean Time To Failure) at low duty cycle	1,000,000
Contact Start Stop (CSS) Cycles	50,000
Data Error Rate per Bits Read	
Recoverable	<10 per 10 ¹²
Nonrecoverable	<1 per 10 ¹⁵
Limited Warranty (years)	5

	250GB	300GB
Operating		
Temperature (°C)	5–55	
Non-Condensing Humidity (%)	5 to 95	
Shock 2 msec (Linear half sine G) read & write	60	
Rotational Shock (rad/sec ² , 2ms)	2000	
Random Vibration 10–2000 Hz (GRMS)	0.86	
Rotational Vibration 10–2000 Hz (rad/sec ²)	12.5	
Altitude (ft)	-650 to 10,000	
Acoustics, Idle (bels)	2.7	

Non-Operating

Temperature (°C)	-40 to 71	
Non-Condensing Humidity (%)	5 to 95	
Shock 2 msec (Linear half sign G)	300	
Vibration 7–800 Hz (GRMS)	3	
Altitude (ft)	-650 to 40,000	

Power Specifications

Voltage Requirements	5V+/-5%	12V+/-10%
Idle Mode (W)	SATA: 6.7 PATA: 6.3	

Physical Dimensions

Width max (mm)	101.6
Length max (mm)	147
Height max (mm)	26.1
Weight typical (grams)	630



For support or information, call us at 1-800-2Maxtor or visit us at www.maxtor.com

All Maxtor products are backed by our leading service and support staff.

Service includes:

- 24-hour on-line troubleshooting tools and email
- Maxtor's commitment to total customer satisfaction
- Product support representatives available Monday-Friday

To speak with a Maxtor product support representative:

In the U.S. and Canada, call 1-800-2MAXTOR, Mon.–Fri. from 8:00 a.m. to 5 p.m. (MST).

In Europe, call +353 1 204 1111 Mon.–Thur. from 8:30 a.m. to 5 p.m. (GMT) and Fri. 8:30 a.m. to 4 p.m. (GMT)

In Australia, call 800-124-328

In Asia, call +65 6 481 6788 Mon.–Fri. from 7:00 a.m. to 3:00 p.m. (Singapore GMT +7)

For purposes of measuring drive capacity, a megabyte (MB) means 1,000,000 bytes, a gigabyte (GB) means 1,000,000,000 bytes. Total accessible capacity varies depending on operating environment. Seek times are at nominal conditions and include settling. Specifications subject to change without notice. Seek performance developed utilizing technology licensed from Convolve, Inc.

* MTTF refers to the estimated mean time to failure based upon a statistical sample.

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